

A complete listing of all claims in this application is set forth below.

In the Claims

Please cancel claims 1-8, 10-11, 14, and 16.

Please amend claims 9, 12 and 15 as set forth below.

9. (Currently amended) A method of storing and melting solid ink for a solid ink printer, said method comprising:

coupling a removable housing in which a solid ink block is stored to at least one printhead;

liquefying with a heater the solid ink block within the housing;

transferring the liquefied ink to the printhead through a fluid outlet port attached to said housing;

receiving printer operation information from a printer controller external to the housing and storing the printer operation information in an electronic storage device within said housing;

providing a plurality of solid ink supply containers;

coupling one solid ink supply container in the plurality of ink supply containers to a printhead to provide liquid ink from the ink supply container;

automatically detecting a low level of ink in the one solid ink supply container coupled to the printhead;

automatically switching from the one solid ink supply container to another one of the solid ink supply containers in the plurality in response to detection of a low ink level in the solid ink supply container coupled to the printhead;

applying pressure with a spring-biased ram to the solid ink block to move a portion of the solid ink block into contact with the heater for liquefying the solid ink block;~~The method of Claim 8 the low ink level detection further comprising:~~

coupling a rheostat to the spring-biased ram; and  
detecting the low ink level with the rheostat.

12. (Currently amended) A solid ink supply container adapted for use with solid ink printers, said container component comprising:

a housing for installing within a solid ink printer, a solid ink block being stored within said housing, said housing being coupled to at least one printhead;

a heater within said housing, said heater for liquefying said solid ink block within said housing;

an outlet port adapted to facilitate transfer of said liquefied ink to the at least one printhead coupled to the housing;

an ink sensor for determining an amount of ink in said housing;

at least one electronic storage device within said housing, said electronic storage device being coupled to a container bus within said housing to receive printer operation information from a printer controller for the printer in which the housing is installed;

electrical contacts coupled to said container bus within said housing; said electrical contacts for coupling the printer controller to the container bus so that the printer controller is enabled to send printer operation information to said electronic storage device in said housing;

a spring-biased ram for applying pressure to the solid ink mass to move a portion of the solid ink block to the heater for melting; and ~~The supply container of Claim 11 further comprising:~~

a rheostat coupled to the spring-biased ram, the rheostat being used to detect a low ink level in the container.

13. (Previously presented) The supply container of Claim 12 further comprising:

a filter for filtering the liquefied ink before the liquefied ink is transported from the container through the outlet port.

15. (Currently amended) A system for supplying solid ink to a solid ink printer comprising:

a solid ink supply container adapted for use with solid ink printers, said container comprising:

a housing for installation in a solid ink printer, a solid ink block being stored within the housing, said housing being coupled to at least one printhead;

a heater within said housing, said heater liquefying within the housing the solid ink block;

a fluid outlet port through a wall of said housing, the liquefied ink being transported through the fluid outlet port to said at least one printhead;

an electronic storage device within said housing, said electronic storage device for storing printer operation information transferred to it by a printer controller external to said ink supply container; and

electrical contacts attached to said housing; said electrical contacts for coupling said electronic storage device to said printer controller to receive printer operation information from said printer controller. The system of Claim 3, wherein said supply container further comprises:

a spring-biased ram for urging said solid ink block to the heater so that the heater melts a portion of the ink block contacting the heater; and ~~The system of Claim 14 said supply container further comprising:~~

a rheostat coupled to the spring-biased ram, said rheostat detecting the a level of ink in said housing.

17. (Previously presented) The system of Claim 15 the container further comprising:

a filter for filtering the liquid ink before transferring the liquid ink to the printhead through the outlet port.

18. (Previously presented) The system of Claim 17 the container further comprising:

a replaceable top for providing access to the container for replacement of the solid ink block.